

# Coronavirus Disease 2019 (COVID-19)



## Investigating the Impact of COVID-19 during Pregnancy

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Based on what is known at this time, pregnant women are at an increased risk for severe illness from COVID-19 compared to non-pregnant women. Additionally, pregnant women with COVID-19 might have an increased risk of adverse pregnancy outcomes, such as [preterm birth](#).

CDC is supporting multiple efforts to understand the impact of COVID-19 on pregnant women and infants. Data collected as part of these efforts can help direct public health action and inform clinical guidance for the care of affected pregnant women and their infants.

# Pregnancy and Neonatal Surveillance

Health departments report cases of COVID-19 to CDC, including cases among pregnant women. In addition, health departments can complete a separate, short pregnancy and newborn-specific supplemental form for pregnant women with laboratory-confirmed COVID-19. Data collected in these supplemental forms include information about the following:

- Timing of SARS-CoV-2 infection during pregnancy
- Severity of COVID-19 disease
- Outcome of the pregnancy
- Whether the newborn was also diagnosed with COVID-19

Health departments can also submit their data on COVID-19 cases among pregnant women and infants up to six months of age to CDC through an existing surveillance activity—[Surveillance for Emerging Threats to Mothers and Babies Network \(SET-NET\)](#).

See the most recent data on COVID-19 during pregnancy

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## Maternal and Infant Health Surveillance: COVID-19 Supplement

CDC's Division of Reproductive Health is collaborating with the [Council of State and Territorial Epidemiologists](#) [↗](#) to provide support and resources to state, tribal, local, and territorial public health agencies to add a COVID-19 questionnaire supplement to existing maternal and infant health surveillance systems. One example is the [Pregnancy Risk Assessment Monitoring System \(PRAMS\)](#), which routinely collects population-based data on maternal behaviors and experiences before, during, and shortly after pregnancy. The questionnaire supplement collects data on the effect of COVID-19 on pregnant and postpartum women and infants. Findings will inform federal, state, local, tribal, and territorial public health response activities to support pregnant and postpartum women and infants.

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# Impact of SARS-CoV-2 Infection during Pregnancy on Obstetric and Neonatal Outcomes – Icahn School of Medicine at Mt. Sinai

The [Icahn School of Medicine at Mt. Sinai](#) is conducting a study to determine SARS-CoV-2 sero-prevalence among pregnant women, that is, the estimated percentage of pregnant women who have been infected with SARS-CoV-2, the virus that causes COVID-19. Using data from electronic health records, the study also examines associations between SARS-CoV-2 infection and adverse pregnancy outcomes. Researchers will determine the extent to which SARS-CoV-2 infection impacts pregnant women in underserved communities in New York City and will explore the role of maternal stress.

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# Perinatal COVID-19 in the U.S.: Surveillance and Epidemiology – Children’s Hospital of Philadelphia (CHOP) and the University of Florida, College of Medicine – Jacksonville

This national registry at [Children’s Hospital of Philadelphia \(CHOP\)](#) [↗](#) and the [University of Florida, College of Medicine – Jacksonville](#) [↗](#) is measuring the current burden of SARS-CoV-2 infection during pregnancy to inform clinical care practices and provide data for future studies on prevention, diagnosis, and treatment of COVID-19. The study is using a robust, real-time national registry to capture information about pregnant women with COVID-19 and their newborn infants. The information collected will contribute to a greater understanding of the potential modes of transmission, risk factors, and rates of transmission of SARS-CoV-2 infection during pregnancy and the impact on the newborn.

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# Pregnancy and Household Transmission COVID-19 Study – University of Washington

The [University of Washington](#) [↗](#) is conducting a study in South King County, Washington on SARS-CoV-2 prevalence, household transmission, and antibody response among pregnant women and their household members. The study is investigating adverse health outcomes and other factors associated with symptomatic and asymptomatic SARS-CoV-2 infection among 1,000 pregnant women screened for SARS-CoV-2 specific IgG antibodies. It is also estimating potential household transmission and duration of antibodies over time (6 months) among pregnant women and their household contacts.

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# Epidemiology of SARS-CoV-2 in Pregnancy and Infancy (ESPI) Network

The ESPI Electronic Cohort study is collecting information from the medical records of women who receive prenatal care at three participating sites and reach the end of their pregnancy between March 2020 and February 2021. Data collection will include information about the following:

- Demographic and maternal characteristics
- Medical conditions
- Prenatal care
- Pregnancy complications, including ambulatory care visits and hospitalizations for acute illness
- Postpartum care
- Laboratory test results for SARS-CoV-2 and influenza
- Pregnancy outcomes
- Selected infant outcomes through 6 months of age

This study aims to understand the characteristics of SARS-CoV-2 infection during pregnancy and the six months after the end of pregnancy, including among infants up to six months of age. It also aims to identify risk factors for severe COVID-19 disease, describe use of investigational and off-label therapeutics, and evaluate effects of COVID-19 on pregnancy and infant outcomes.

The ESPI Community Cohort study is a multisite collaboration designed to estimate the incidence of asymptomatic and symptomatic SARS-CoV-2 infection and understand the characteristics of SARS-CoV-2 infection in pregnant women. This includes the spectrum of disease, conditions, and risk factors for infection and developing severe illness. As a secondary objective, this study will examine the effect of COVID-19 during pregnancy on pregnancy and newborn outcomes. The study enrolls pregnant women at less than 28 weeks of pregnancy and follows them through the end of their pregnancies with weekly surveillance for SARS-CoV-2 infection and symptoms of COVID-19-like illness. Information is also collected two to four weeks after the end of their pregnancies, on end-of-pregnancy, infant, and postpartum outcomes.

## Additional Resources

[Pregnancy, Breastfeeding, and Caring for Newborns](#)

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[Evaluation and Management Considerations for Neonates At Risk for COVID-19](#)

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[Considerations for Inpatient Obstetric Healthcare Settings](#)

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[Care for Breastfeeding Women](#)

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